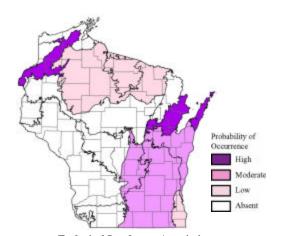
Banded Killifish (Fundulus diaphanus)

Species Assessment Scores*

State rarity:	3
State threats:	4
State population trend:	4
Global abundance:	2
Global distribution:	4
Global threats:	3
Global population trend:	4
Mean Risk Score:	3.4
Area of importance:	3

^{*} Please see the <u>Description of Vertebrate Species</u> <u>Summaries (Section 3.1.1)</u> for definitions of criteria and scores.



Ecological Landscape Associations
Please note that this is not a range map. Shading does not imply that the species is present throughout the Landscape, but represents the probability that the

species occurs somewhere in the Landscape.

Landscape -community Combinations of Highest Ecological Priority

Ecological Landscape	Community
Central Lake Michigan Coastal	Lake Michigan
Central Lake Michigan Coastal	Warmwater streams
Central Sand Hills	Inland lakes
North Central Forest	Inland lakes
Northern Highland	Inland lakes
Northern Lake Michigan Coastal	Inland lakes
Northern Lake Michigan Coastal	Lake Michigan
Northern Lake Michigan Coastal	Warmwater streams
Northwest Sands	Inland lakes
Northwest Sands	Warmwater streams
Southeast Glacial Plains	Inland lakes
Southeast Glacial Plains	Warmwater streams
Southern Lake Michigan Coastal	Lake Michigan

Threats and Issues

- Dams that do not allow for water level fluctuations that mimic natural low and high flow conditions threaten this species.
- Shoreline habitat destruction and alteration due to development pressures on the shoreline proper and a philosphy of stabilizing artificially rasied water elevations threaten this species.
- Exotic invasive plants and animals threaten this species through habitat degredation and possible alteration of food web dynamics.
- Non-point source pollution from land management practices in the watersheds surrounding the lakes and inlet and outlet streams where this species occurs threaten this species. For example, fertilization of lawns can increase phosphorus and nitrogen concentrations in lakes, potentially increasing growth of algae and aquatic plants. When aggressive invasive species such as Eurasian Watermilfoil and Curly-leaf Pondweed are present, this can lead to large alterations of habitat in these systems.

- Wave energy generated from heavy boating activity, particularly larger boats on smaller bodies of water, may degrade shoreline habitats.
- Aquatic plant control efforts threaten this species, as vegetated shoreline areas on lakes and streams that this species depends on are often cleared for beaches, access to boat ramps, and other purposes.
- Habitat loss and degredation from shoreline development, littoral zone modification of lakes, and agriculture and urbanization of shorelines and watersheds threatens this species.

Priority Conservation Actions

- Reduction of non-point source pollution through improved land use practices is needed in watersheds where this species occurs.
- Tax incentives that promote better stewardship of land and water resources may benefit this species.
- Protecton and restoration of natural lake and river shoreline areas and watersheds is needed for conservation of this species.
- Aquatic plant protection and restoration is needed for conservation of this species, which prefers shallow sand, gravel, or detritus-covered bottom areas where there are patches of submerged aquatic plants.
- Protective shoreline zoning is needed to protect shallow vegetated shoreline habitats that this species needs for feeding, shelter, and spawning.
- More information on status and habitat use in Wisconsin is needed to inform and focus conservation efforts.